



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/681,354	03/24/2001	Robert M. Fries	1018.106US1	5279

47973 7590 10/17/2005

WORKMAN NYDEGGER/MICROSOFT
1000 EAGLE GATE TOWER
60 EAST SOUTH TEMPLE
SALT LAKE CITY, UT 84111

EXAMINER

SALCE, JASON P

ART UNIT	PAPER NUMBER
----------	--------------

2614

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/681,354

Applicant(s)

FRIES ET AL.

Examiner

Jason P. Salce

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-15,17,18,20-29,31,32 and 36-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4-15, 17-18, 20-29, 31-32 and 36-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/2/2005 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1-2, 4-15, 17-18, 20-29, 31-32 and 36-39 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 4-5, 8, 10-12 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takagawa et al. (U.S. Patent No. 5,987,612) in view of Nguyen et al. (U.S. Patent Application Publication 2002/0010932) in further view of Tsuria (U.S. Patent No. 6,405,369).

Referring to claim 1, Takagawa discloses a hardware card comprising a case having a form factor (see IC or magnetic card 9b in Figures 1 and 2 and Column 4, Lines 10-12) and a non-volatile memory situated within the case (see Column 4, Line 12 for the cards storing data within the card) and having data including a URL corresponding to a server (see Column 4, Lines 57-60), the card further comprising means for providing the data to a computer to enable the computer to connect to a server (see Column 4, Line 66 through Column 5, Line 2).

Takagawa also discloses that the server (WWW server 6 in Figure 1), upon being connected to by the computer (see step S12 in Figure 5), uses identification information obtained from the hardware card (see step S15 in Figure 5) to determine a type of programming information that has been purchased by a consumer of the card (see Column 4, Lines 29-32) and thereafter enables the computer to access the data on the server (see Column 5, Lines 2-5 and step S16 in Figure 5).

Takagawa fails to disclose that the URL is used to connect a television tuning device to a WWW Server containing an electronic program guide (EPG) from a plurality of EPG providers.

Nguyen discloses a television-tuning device (see set top box 22 in Figure 1) that contains an input for a hardware card (see smart card reader 140 in Figure 2 and Paragraph 0035). The television-tuning device is capable of being instructed to access an WWW (EPG) server using URL data in order to access an EPG provider from among a plurality of EPG providers (see Paragraph 0024).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the hardware card with WWW Server access using a URL, as taught by Takagawa, to utilize the television tuning device with hardware card reader, which uses a URL to access an EPG provider, as taught by Nguyen, for the purpose of allowing a user to invoke a web based electronic program guide seamlessly upon execution of an appropriate command to retrieve the EPG (see Paragraph 0048 of Nguyen).

Takagawa and Nguyen fail to disclose that a consumer may purchase the hardware card.

Tsuria discloses that consumers purchase hardware cards from a vendor (see Column 6, Lines 9-15).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify receipt of a consumer's hardware card, as taught by Takagawa and Nguyen, to allow a consumer to purchase a hardware card from a vendor, as taught by Tsuria, for the purpose of preventing substantial losses to operators of television transmission systems (see Column 1, Lines 26-27 of Tsuria).

Referring to claim 2, Takagawa and Nguyen disclose that the data represents one or more loader programs for the television-tuning device (see the rejection of claim 1 for the hardware card of Takagawa being modified to be inserted into a STB, which accepts hardware cards and can access an EPG from an EPG provider and further note that the URL stored on the hardware card is a loader program that is provided to the

Art Unit: 2614

STB), each loader program corresponding to an EPG (see Paragraph 0048, Lines 25-27 for the URL corresponding to the EPG).

Referring to claim 4, Nguyen discloses that each loader program includes specification of a transmission network over which encoded EPG information is received from the EPG provider to which the loader program corresponds (see Paragraph 0046 for the URL (loader program) including a specification of a transmission network, where the Internet is the transmission network specified by a URL).

Referring to claim 5, Nguyen discloses an out-of-band modem in Paragraph 0046.

Referring to claim 8, Nguyen discloses that the data (URL) is non-executable (see Paragraph 0046 and note that a URL is a definition of where to access data on the Internet and is a non-executable file).

Referring to claim 11, Nguyen discloses that the television-tuning device is a set-top box (see Paragraph 0008 and set top box 22 in Figure 1).

Referring to claims 10 and 12, Nguyen discloses that a flash memory can be utilized (see Paragraph 0055).

Referring to claim 40, Nguyen discloses that the server enables the television-tuning device to access the EPG by providing the EPG to the tuning device (see paragraph 0046).

4. Claims 6-7, 9, 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takagawa et al. (U.S. Patent No. 5,987,612) in view of Nguyen et al. (U.S. Patent

Application Publication 2002/0010932) in further view of Tsuria (U.S. Patent No. 6,405,369) in further view of De Vito et al. (U.S. Patent No. 6,452,616).

Referring to claim 6, Takagawa, Nguyen and Tsuria disclose all of the limitations in claim 2, but fail to specifically teach that each loader program comprises a database segment to transfer the loader program into the television-tuning device.

De Vito discloses that the loader program (data stored on the smart card) includes a database segment to transfer the loader program into the television-tuning device (see Column 9, Lines 1-18 for inserting the smart card and transferring the user interface module (loader program) into the decoder). Therefore, the database segment that provides data transfer from the smart card to the decoder is provided by De Vito, otherwise no data transfer would be able to take place.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the hardware card system, as taught by Takagawa, Nguyen and Tsuria, using the hardware card with additional data (database segment), as taught by De Vito, for the purpose of providing a flexible solution to allow the evolution of a user interface (see Column 2, Lines 15-17 of De Vito).

Referring to claim 7, Takagawa, Nguyen and Tsuria disclose all of the limitations in claim 2, but fail to specifically teach that each loader program comprises a segment to provide a user interface.

De Vito discloses that each loader program (data stored on the smart card) includes a segment to provide a user interface (see Column 10, Lines 18-30 for the

Art Unit: 2614

Card Retrieval function providing a segment (program code) needed to provide the display screen).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the hardware card system, as taught by Takagawa, Nguyen and Tsuria, using the hardware card with additional data (user interface segment), as taught by De Vito, for the purpose of providing a flexible solution to allow the evolution of a user interface (see Column 2, Lines 15-17 of De Vito).

Referring to claim 9, Takagawa, Nguyen and Tsuria disclose all of the limitations in claim 2, but fail to specifically teach that non-executable information is decodable by a decoder segment of the television-tuning device.

De Vito discloses that the non-executable information is decodable by a decoder segment of the television-tuning device (see Column 4, Lines 54-60 for decoding the scrambled data packet by a descrambler circuit 7 (segment of the television-tuning device) in Figure 1).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the hardware card system, as taught by Takagawa, Nguyen and Tsuria, using the hardware card with non-executable information, as taught by De Vito, for the purpose of providing a flexible solution to allow the evolution of a user interface (see Column 2, Lines 15-17 of De Vito).

Referring to claim 31, Nguyen discloses that the data (URL) is non-executable (see Paragraph 0046 and note that a URL is a definition of where to access data on the Internet and is a non-executable file), but Takagawa, Nguyen and Tsuria fail to disclose

that the hardware card specifies to a user what the user must do to load the data into the television-tuning device.

De Vito teaches that the hardware card specifies to a user what the user must do to load the data into the television-tuning device (see Figure 2 for providing the user interface which instructs a user how to access data on the smart card).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the hardware card system, as taught by Takagawa, Nguyen and Tsuria, using the hardware card that specifies to a user what the user must do to load the data into the television device, as taught by De Vito, for the purpose of providing a flexible solution to allow the evolution of a user interface (see Column 2, Lines 15-17 of De Vito).

Claim 32 corresponds to claim 31, where De Vito further discloses that a password can be entered in order to access a parental lock function (see Figure 2 and Column 7, Line 48).

5. Claims 13-15, 17-18, 20, and 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al. (U.S. Patent Application Publication 2002/0010932) in view of Takagawa et al. (U.S. Patent No. 5,987,612) in further view of De Vito et al. (U.S. Patent No. 6,452,616).

Referring to claim 13, Nguyen discloses a television-tuning device with an outer case (see element 22 in Figure 1).

Nguyen also discloses internal components (see Figure 2) hard-coded to a particular EPG provider (see Paragraph 0004, Lines 3-5 and note that if the EPG is received from a specific cable or satellite provider, then the STB is inherently hard-coded to continuously receive the EPG from the cable or satellite provider).

Nguyen also discloses a slot within the outer case to accept a hardware card having a form factor (see Paragraph 0035) and that the television-tuning device has the capability to received EPG information from at least one other EPG provider, that is different than said EPG provider the television-tuning device is hard-coded to (see Paragraph 0006).

Nguyen also discloses switching to the at least one other EPG provider than the particular EPG provider that the television-tuning device is hard-coded to (see again Paragraph 0006 and Figure 8).

Nguyen also discloses one or more connections within the outer case to communicatively couple the device to a display (see connection 166 in Figure 2).

Nguyen fails to teach that the hardware card provides the device with capability to receive information over the Internet (such as EPG information).

Takagawa discloses a hardware card comprising a case having a form factor (see IC or magnetic card 9b in Figures 1 and 2 and Column 4, Lines 10-12) and a non-volatile memory situated within the case (see Column 4, Line 12 for the cards storing data within the card) and having data including a URL corresponding to a server (see Column 4, Lines 57-60), the card further comprising means for providing the data to a computer to enable the computer to connect to a server (see Column 4, Line 66 through

Column 5, Line 2), wherein the server, upon being connected to by the computer, indicates how to access the data on the server (see Column 5, Lines 2-5). Therefore, Takagawa provides a hardware card storing data (the URL) configured to provide the device with capability to received Internet data (EPG data provided over the Internet by Nguyen).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the STB, as taught by Nguyen, to accept a hardware card that accesses data from the Internet, as taught by Takagawa, for the purpose of providing a simpler way to retrieve data and provide an environment for a user to easily access the Internet (see Column 11, Lines 65-66 of Takagawa).

Nguyen and Takagawa fail to disclose the specifics of the loader program functionality discussed in the rejections of claims 3 (now cancelled) and claims 6-7 and 31.

De Vito discloses that each loader program comprises a decoder segment (see Column 4, Lines 35-62 for using ECM data for descrambling scrambled (encoded) data packet payload information) to decode encoded (scrambled) electronic program guide information (see Column 3, Lines 47-56 for distributing incoming data packet information to the appropriate applications and Column 3, Lines 60-64 for an application being a program guide, which uses the incoming information (scrambled/encoded data packets) which are descrambled using the ECM data described at Column 4, Lines 35-62) from the electronic program guide provider to which the loader program corresponds (see Figure 4 and Column 10, Lines 42-55 for the user interface module

Art Unit: 2614

(loader program) being integrated into the main user interface stored in the viewer's television tuning device and that the main user interface program guide data is received from an electronic program guide provider (see again Column 3, Lines 40-64)). Also note that the ECM data in the data packets are received from the broadcaster (see Column 4, Lines 37-42) and are stored in the smart card 10 (see Column 4, Lines 54-56), therefore the loader program (user interface module and entitlement data (ECM and EMM data)) corresponds to the electronic program guide provider.

The examiner notes that because of the broad recitation of "loader program" the examiner is interpreting a "loader program" to be any piece of data provided by the hardware card that is used to provide a piece of functionality to the STB after it is plugged into the STB card reader (see smart card reader 140 in Figure 2 of Nguyen).

De Vito also discloses that the loader program (data stored on the smart card) includes a database segment to transfer the loader program into the television-tuning device (see Column 9, Lines 1-18 for inserting the smart card and transferring the user interface module (loader program) into the decoder). Therefore, the database segment that provides data transfer from the smart card to the decoder is provided by De Vito, otherwise no data transfer would be able to take place.

De Vito also discloses that each loader program (data stored on the smart card) includes a segment to provide a user interface (see Column 10, Lines 18-30 for the Card Retrieval function providing a segment (program code) needed to provide the display screen) and that the hardware card contains information that specifies to a user what the user must do to load the data into the television-tuning device (see Figure 2 for

providing the user interface which instructs a user how to access data on the smart card).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the hardware card system, as taught by Nguyen and Takagawa, using the hardware card code segments, as taught by De Vito, for the purpose of providing a flexible solution to allow the evolution of a user interface (see Column 2, Lines 15-17 of De Vito).

Claim 14 corresponds to claim 13, where Nguyen further discloses that a flash memory can be utilized (see Paragraph 0055).

Claim 15 corresponds to claim 13, where Nguyen and Takagawa disclose all of the limitations in claim 13, as well as Nguyen further disclosing that the data (URL) is non-executable (see Paragraph 0046 and note that a URL is a definition of where to access data on the Internet and is a non-executable file), but fail to teach that the data stored is decodable by a decoder segment of the television tuning device.

De Vito discloses that the non-executable information is decodable by a decoder segment of the television-tuning device (see Column 4, Lines 54-60 for decoding the scrambled data packet by a descrambler circuit 7 (segment of the television-tuning device) in Figure 1).

Referring to claim 17, see the rejection of claim 13.

Claim 18 corresponds to claim 17, where De Vito discloses that the loader program (data stored on the smart card) includes a database segment to transfer the loader program into the television-tuning device (see Column 9, Lines 1-18 for inserting

the smart card and transferring the user interface module (loader program) into the decoder). Therefore, the database segment that provides data transfer from the smart card to the decoder is provided by De Vito, otherwise no data transfer would be able to take place.

Referring to claim 20, Nguyen discloses smart card reader 140 in Figure 2, therefore a smart card (hardware card) can inherently be removed or inserted in order for the STB to read information from the smart card.

Claim 36 corresponds to claim 18, where Nguyen further discloses that the EPG provider and the other EPG provide encode the EPG information differently (see Paragraph 0024 for receiving EPG information from an Internet provider and an EPG server of a cable or satellite provider and Paragraph 0044 for receiving the EPG information from the Internet provider in HTML form). The examiner notes that since the EPG information received from the Internet provider is in HTML form and the EPG provider from the cable or satellite provider is received from the television channel tuned by a user that the two different types of EPG information is encoded differently, one in HTML form and one in television signal form.

Referring to claim 37, Nguyen fails to specifically disclose that the web based EPG and the EPG provided from the cable or satellite provider contains different types of quality.

The examiner takes Official Notice that it is well known in the art to provide different EPGs from different EPG providers that display a different quality of

information. For example, one EPG may have the ability to be filtered by genre and the other might filter by category, thereby providing a different quality.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the EPG information from the different EPG providers, as taught by Nguyen and Takagawa, using various different qualities per individual EPGs, for the purpose of providing more intuitive and user-friendly user interfaces for accessing television programming.

Referring to claim 38, see the rejection of claim 36.

6. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al. (U.S. Patent Application Publication 2002/0010932) in view of Takagawa et al. (U.S. Patent No. 5,987,612) in further view of De Vito et al. (U.S. Patent No. 6,452,616) in further view of Tsuria (U.S. Patent No. 6,405,369).

Claim 41 corresponds to claim 17, where Takagawa further discloses that the server (WWW server 6 in Figure 1), upon being connected to by the computer (see step S12 in Figure 5), uses identification information obtained from the hardware card (see step S15 in Figure 5) to determine a type of programming information that has been purchased by a consumer of the card (see Column 4, Lines 29-32) and thereafter enables the computer to access the data on the server (see Column 5, Lines 2-5 and step S16 in Figure 5). Also note the rejection of claim 17 for the URL containing a link to an EPG provider, which is transmitted by the server.

Nguyen, Takagawa and De Vito fail to disclose that a consumer may purchase the hardware card.

Tsuria discloses that consumers purchase hardware cards from a vendor (see Column 6, Lines 9-15).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify receipt of a consumer's hardware card, as taught by Takagawa and Nguyen, to allow a consumer to purchase a hardware card from a vendor, as taught by Tsuria, for the purpose of preventing substantial losses to operators of television transmission systems (see Column 1, Lines 26-27 of Tsuria).

7. Claims 21-25 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuria (U.S. Patent No. 6,405,369) in view of De Vito et al. (U.S. Patent No. 6,452,616) in further view of Nguyen et al. (U.S. Patent Application Publication 2002/0010932).

Referring to claim 21, Tsuria discloses offering a consumer one or more electronic hardware cards for purchase (see Column 6, Lines 9-10 for purchasing a hardware card from a vendor). The examiner notes that a vendor is defined as, "one that sells or vends". Therefore, a vendor inherently offers (vends) goods or services for purchase, such as a hardware card (see definition of "vendor" and "vends" from www.dictionary.com).

Tsuria also discloses that the cards can be inserted into a corresponding slot of a television-tuning device used by the consumer (see Column 5, Lines 30-31 for inserting a smart card 18 into a smart card slot 20 of a decoder 10 in Figure 1).

Tsuria also discloses purchasing by the consumer an electronic hardware card (see Column 6, Lines 17-19 for purchasing one or more smart cards).

Tsuria also discloses loading the electronic hardware card into the television-tuning device (see Column 5, Lines 30-42 for loading a smart card into a decoder in Figure 1).

Tsuria fails to disclose that the smart card can enable the television-tuning device to access different store electronic program guide information and the specifics of the loader program functionality discussed in the rejections of claims 3 (now cancelled) and claims 6-7 and 31.

De Vito discloses that a smart card contains a user interface module (electronic program guide information), which is enabled when plugged into a decoder (television tuning-device) (see Column 9, Lines 1-15 and Figure 3).

De Vito discloses that each loader program comprises a decoder segment (see Column 4, Lines 35-62 for using ECM data for descrambling scrambled (encoded) data packet payload information) to decode encoded (scrambled) electronic program guide information (see Column 3, Lines 47-56 for distributing incoming data packet information to the appropriate applications and Column 3, Lines 60-64 for an application being a program guide, which uses the incoming information (scrambled/encoded data packets) which are descrambled using the ECM data described at Column 4, Lines 35-

62) from the electronic program guide provider to which the loader program corresponds (see Figure 4 and Column 10, Lines 42-55 for the user interface module (loader program) being integrated into the main user interface stored in the viewer's television tuning device and that the main user interface program guide data is received from an electronic program guide provider (see again Column 3, Lines 40-64)). Also note that the ECM data in the data packets are received from the broadcaster (see Column 4, Lines 37-42) and are stored in the smart card 10 (see Column 4, Lines 54-56), therefore the loader program (user interface module and entitlement data (ECM and EMM data)) corresponds to the electronic program guide provider.

The examiner notes that because of the broad recitation of "loader program" the examiner is interpreting a "loader program" to be any piece of data provided by the hardware card that is used to provide a piece of functionality to the STB after it is plugged into the STB card reader (see smart card reader 140 in Figure 2 of Nguyen).

De Vito also discloses that the loader program (data stored on the smart card) includes a database segment to transfer the loader program into the television-tuning device (see Column 9, Lines 1-18 for inserting the smart card and transferring the user interface module (loader program) into the decoder). Therefore, the database segment that provides data transfer from the smart card to the decoder is provided by De Vito, otherwise no data transfer would be able to take place.

De Vito also discloses that each loader program (data stored on the smart card) includes a segment to provide a user interface (see Column 10, Lines 18-30 for the Card Retrieval function providing a segment (program code) needed to provide the

display screen) and that the hardware card contains information that specifies to a user what the user must do to load the data into the television-tuning device (see Figure 2 for providing the user interface which instructs a user how to access data on the smart card).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the smart card, as taught by Tsuria, using the smart card with electronic program guide information, as taught by De Vito, for the purpose of providing a flexible solution to allow evolution of a user interface (see Column 2, Lines 13-14 of De Vito) by adapting a user interface module to each user based on the content stored on a portable smart card (see Column 2, Lines 15-17 of De Vito).

Tsuria and De Vito both fail to teach accessing EPG information from different EPG providers.

Nguyen discloses a television-tuning device (see set top box 22 in Figure 1) that contains an input for a hardware card (see smart card reader 140 in Figure 2 and Paragraph 0035). The television-tuning device is capable of being instructed to access an WWW (EPG) server using URL data in order to access an EPG provider from among a plurality of EPG providers (see Paragraph 0024).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the hardware card system, as taught by Tsuria and De Vito, to utilize the television tuning device with hardware card reader, which uses a URL to access an EPG provider, as taught by Nguyen, for the purpose of allowing a user to

invoke a web based electronic program guide seamlessly upon execution of an appropriate command to retrieve the EPG (see Paragraph 0048 of Nguyen).

Claim 22 corresponds to claim 21, where Tsuria discloses inserting a smart card into a television-tuning device (see Column 5, Lines 30-33) and the subscriber inserting the smart card into television-tuning device (see Column 7, Lines 24-27).

Claim 23, corresponds to claim 21, where Tsuria discloses inserting a smart card into a television-tuning device (see Column 5, Lines 30-33) and the subscriber inserting the smart card into television-tuning device (see Column 7, Lines 24-27), but fails to disclose that a merchant loads the card into the television-tuning device.

The examiner takes Official Notice that it is well known for a merchant to initially install a smart into a television-tuning device.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the subscriber installing the electronic program guide hardware card, as taught by Tsuria and De Vito, with a merchant providing the installation, for the purpose of allowing the merchant to teach the consumer how to use the television-tuning device with the smart card by providing an highly intuitive demonstration.

Claim 24 corresponds to claim 21, where Tsuria discloses initially comprising receiving of the television-tuning device by the consumer (see Column 4, Line 67 and Column 5, Lines 1-4 for initially receiving a decoder installed in a room of the subscriber's residence).

Claim 25 corresponds to claim 24, where Tsuria discloses that receiving of the television-tuning device by the consumer (see the rejection of claim 24) includes purchasing of the television-tuning device by the consumer (see again Column 4, Line 67 and Column 5, Lines 1-4 for purchasing the received decoder installed at the subscriber's residence).

Referring to claim 39, see the rejection of claim 24 and further note that the EPG provider is located at the cable or satellite provider, as taught by Nguyen. Therefore if the cable provider supplies the cable box to the user, then the EPG provider is a part of the cable provider, therefore the EPG provider is supplying the cable box as well.

8. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuria (U.S. Patent No. 6,405,369) in view of De Vito et al. (U.S. Patent No. 6,452,616) in further view of Nguyen et al. (U.S. Patent Application Publication 2002/0010932) in further view of Forrester (Can Sleepy Set-Top Boxes Ever Be Sexy?, Fall 1999, TBS Archives).

Referring to claim 26, Tsuria, De Vito and Nguyen disclose all of the limitations in claim 24, as well as receiving of the television-tuning device by the consumer (see the rejection of claim 24), but fail to disclose providing of the television-tuning device by a merchant to the consumer free-of-charge to the consumer.

Forrester discloses that the merchant BSkyB gave away television-tuning devices (STBs) free-of-charge to consumers (see Page 1, Paragraph 5).

At the time the invention was made, it would have been obvious for a person of ordinary skill in the art, to modify the sale of television-tuning devices, as taught by Tsuria, De Vito and Nguyen, by providing the consumers television-tuning devices free-of-charge, as taught by Forrester, for the purpose of enticing more consumers to subscribe to a merchant's particular programming services.

9. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuria (U.S. Patent No. 6,405,369) in view of De Vito et al. (U.S. Patent No. 6,452,616) in further view of Nguyen et al. (U.S. Patent Application Publication 2002/0010932) in further view of the U.S. Department of Justice (Undercover Customs Operation Results in Charges and Pleas in Connection with Stolen Satellite Television).

Referring to claim 27, Tsuria, De Vito and Nguyen disclose all of the limitations in claim 24, but fail to disclose that when a receiver is purchased, the smart card is included along with the television-tuning device.

The U.S. Department of Justice has provided a press release stating that when a customer signs a contract with DirecTV, a smart card comes with the receiver that the customer inserts into a box on a television to activate the service (see Page 1, Paragraph 6).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify receiving of the television-tuning device, as taught by Tsuria, De Vito and Nguyen, by providing the consumer with the television-tuning device along with a smart card, as taught by the U.S. Department of Justice, for the purpose of

providing specialized programming to customers for a periodic flat fee (see Page 1, Paragraph 6 of the U.S. Department of Justice's Press Release).

10. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuria (U.S. Patent No. 6,405,369) in view of De Vito et al. (U.S. Patent No. 6,452,616) in further view of Nguyen et al. (U.S. Patent Application Publication 2002/0010932) in further view of Cooper et al. (U.S. Patent No. 6,754,904).

Referring to claim 28, Tsuria, De Vito and Nguyen disclose all of the limitations in claim 24, as well as De Vito disclosing access to a provider by the television-tuning device (see Column 3, Lines 40-56 for accessing data packets sent from a broadcaster (provider) by a decoder (television-tuning device)).

De Vito also discloses receiving different electronic program guide information (see Column 3, Lines 60-64 for receiving electronic program guide information for upcoming events, therefore providing a variety of different information (also see Column 7, Lines 45-55 for different types of information) associated with the electronic program guide hardware card inserted into the television-tuning device (see Column 9, Lines 1-18 for providing a user interface module stored on a smart card, to integrate into the main user interface in the television-tuning device)).

However, Tsuria, De Vito and Nguyen are silent as to the broadcaster (provider) being a provider server.

Cooper discloses that different EPG information can be transmitted in the VBI of traditional video signals through a server 506 (see Column 5, Lines 16-32).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the broadcaster, as taught by De Vito, Tsuria and Nguyen, using the server for transmitting the EPG information through the VBI, as taught by Cooper, for the purpose of unobtrusively transmitting information to the set-top boxes (see Column 5, Lines 27-28 of Cooper).

11. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuria (U.S. Patent No. 6,405,369) in view of De Vito et al. (U.S. Patent No. 6,452,616) in further view of Nguyen et al. (U.S. Patent Application Publication 2002/0010932) in further view of Spies et al. (U.S. Patent No. 6,055,314).

Referring to claim 29, Tsuria, De Vito and Nguyen disclose all of the limitations in claims 24, as well as Tsuria disclosing purchasing the electronic program guide hardware card by the consumer (see the rejection of claim 21) and De Vito indicating the different electronic program guide information associated with the electronic program guide hardware card (also see the rejection of claim 21).

However, Tsuria, De Vito and Nguyen are silent as to registering the hardware card with a provider server.

Spies discloses registering an IC card 50 with a merchant computing unit 44 using a credential 54 and once the IC card is approved (registered) with the provided credential, the viewer is allowed to access the information (see Column 6, Lines 34-58). The examiner notes that since the merchant computing unit serves the viewer with the information, it is therefore a server provider as recited in the claim.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the program guide smart card distribution system, as taught by Tsuria, De Vito and Nguyen, using the smart card registration system, as taught by Spies, for the purpose of eliminating the risk that cracking a specific hardware component such as the STB will compromise the entire system (see Column 2, Lines 4-5 of Spies).

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason P. Salce whose telephone number is (571) 272-7301. The examiner can normally be reached on M-F 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason P Salce
Patent Examiner

Application/Control Number: 09/681,354

Page 25

Art Unit: 2614

Art Unit 2614

October 13, 2005

James Suter
10/13/05